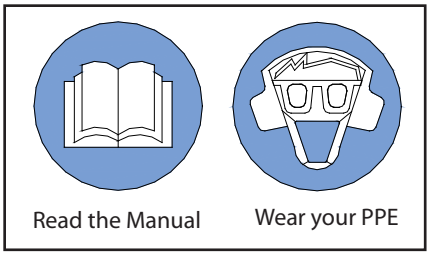
STANLEY®

# BR40 Thru BR87

# HYDRAULIC BREAKER

## SAFETY, OPERATION AND MAINTENANCE

## USER'S MANUAL




CE

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# WARRANTY

Stanley Hydraulic Tools (hereinafter called “Stanley”), subject to the exceptions contained below, warrants new hydraulic tools for a period of one year from the date of sale to the first retail purchaser, or for a period of 2 years from the shipping date from Stanley, whichever period expires first, to be free of defects in material and/or workmanship at the time of delivery, and will, at its option, repair or replace any tool or part of a tool, or new part, which is found upon examination by a Stanley authorized service outlet or by Stanley’s factory in Milwaukie, Oregon to be DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP.

**WARRANTY REGISTRATION:** STANLEY ASSUMES NO LIABILITY FOR WARRANTY CLAIMS SUBMITTED FOR WHICH NO TOOL REGISTRATION IS ON RECORD. In the event a warranty claim is submitted and no tool registration is on record, no warranty credit will be issued without first receiving documentation which proves the sale of the tool or the tools’ first date of usage within 15 days of sale. The term “DOCUMENTATION” as used in this paragraph is defined as a bill of sale, or letter of intent from the first retail customer. A WARRANTY REGISTRATION FORM THAT IS NOT ALSO ON RECORD WITH STANLEY WILL NOT BE ACCEPTED AS “DOCUMENTATION”.

**NO ADDITIONAL WARRANTIES OR REPRESENTATIONS**

This limited warranty and the obligation of Stanley thereunder is in lieu of all other warranties, expressed or implied including merchantability or fitness for a particular purpose except for that provided herein. There is no other warranty. This warranty gives the purchaser specific legal rights and other rights may be available which might vary depending upon applicable law.

For additional details on the warranty contact your distributor or call Stanley Hydraulic Tools at the number on the back of this manual and ask for a Customer Service Representative.

**SERVICING THE STANLEY HYDRAULIC breaker. This manual contains safety, operation, and routine maintenance instructions. Stanley Hydraulic Tools recommends that servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.**

**⚠ WARNING**

**SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.**

**REPAIRS AND / OR SERVICE TO THIS TOOL MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.**

**For the nearest authorized and certified dealer, call Stanley Hydraulic Tools at the number listed on the back of this manual and ask for a Customer Service Representative.**

# CERTIFICATE OF CONFORMITY

**CERTIFICATE OF CONFORMITY**
**ÜBEREINSTIMMUNGS-ZERTIFIKAT**
**CERTIFICAT DE CONFORMITE CEE**
**CERTIFICADO DE CONFORMIDAD**
**CERTIFICATO DI CONFORMITA**

CE

STANLEY
Hydraulic Tools

I, the undersigned:
Ich, der Unterzeichnende:
Je soussigné:
El abajo firmante:
lo sottoscritto:

**Piert, Charlie**

Surname and First names/Familiennname und Vornamen/Nom et prénom/Nombre y apellido/Cognome e nome

**hereby certify that the construction plant or equipment specified hereunder:**
**bestätige hiermit, daß das im folgenden genannten Werk oder Gerät:**
**certifies par ceci que l' usine ou l' équipement de construction indiqué cidessous:**
**por el presente certifico que la fabrica o el equipo especificado a continuacion:**
**certifico che l'impianto o l'attrezzatura sotto specificata:**

1. Category/Kategorie/Catégorie/Categoria/Categoria: **Hydraulic Hand Held Concrete Breaker**
2. Make/Ausführung/Marque/Marca/Marca **Stanley**
3. Type/Typ/Type/Tipo/Tipo: **BR40, BR45, BR48, BR67, & BR87**

**Has been manufactured in conformity with - EEC Type examination as shown.**
**Wurde hergestellt in Übereinstimmung mit - EEC Typ-Prüfung nach.**
**Est fabriqué conformément - au(x) type(s) examiné(s) comme indiqué dans le tableau ci-après.**
**Ha sido fabricado de acuerdo con - tipo examen EEC como dice.**
**E' stata costruita in conformitá con - le norme CEE come illustrato.**

| | **Examen CEE de type** | | | |
|---|---|---|---|---|
| Directive<br>Richtlinie<br>Directives particulières<br>Directriz<br>Direttiva | No.<br>Nr<br>Numéro<br>No<br>n. | Date<br>Datum<br>Date<br>Fecha<br>Data | Approved body<br>Prüfung durch<br>Organisme agréé<br>Aprobado<br>Collaudato | Date of expiry<br>Ablaufdatum<br>Dated´expiration<br>Fecha de caducidad<br>Data di scadenza |
| EN | 792-4 | 2008 | Self | NA |
| Noise Directive | 2000/14/EC | 2000 | SMP Svensk Maskinprovning AB (Notified body)<br>Fyrisborgsgatan 3, 754 50 Uppsala, Sweden | NA |
| Machinery Directive | 98/37/EC | 1998 | Self | NA |

Measurements/Messungen/Mesures/Mediciones/Misurazioni:

| | BR40 | BR45 | BR48 | BR67 | BR87 |
|---|---|---|---|---|---|
| Measured sound power/Gemessener Schallleistungspegel/De puissance acoustique mesuré/De potencia acústica medido/Di Potenza sonora | 106 LwA | 106 LwA | 106 LwA | 107 LwA | 110 LwA |
| Guaranteed sound power/Garantierte Schallleistung/De puissance acoustique garanti/De potencia acústica garantizado/Di Potenza Sonora garantito | 107 LwA | 107 LwA | 107 LwA | 110 LwA | 111LwA |
| Noise related value/ Rauschen im Zusammenhang mit Wert/Bruit liées valeur/Ruido relacionados con el valor/Rumore correlate valore. | 21 kg | 23 kg | 25 kg | 31 kg | 38 kg |
| Year of manufacture/of manufacture/Baujahr/année de fabrication/Año de fabricacion/Anno di fabbricazione | 2006 | 2006 | 2006 | 2006 | 2006 |
| Serial number of equipment/Seriennummer des Geräts/Numéro de série de l'équipement/Numero de serie del equipo/Matricola dell' attrezzatura: | All | All | All | All | All |

We declare that it meets the specifications of Noise Directive 2000/14/EC, measured in accordance to the conformity evaluation method set out in Annex VI para. 5 and evaluated during production as in Annex VI para. 6, 2nd procedure.

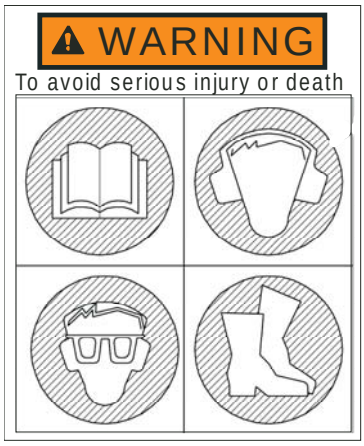
7. Representative in the Union: **Stanley Dubuis 17-19, rue Jules Berthonneau-BP 3406 41034 Blois Cedex, France.**
   Vertreter in der union/Représentant dans l'union/Representante en la union/Rappresentante presso l'unione

Done at/Ort/Fait à/Dado en/Fatto a Stanley Hydraulic Tools, Milwaukie, Oregon USA Date/Datum/le/Fecha/Data 2001

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Puesto/Posizione Quality Assurance Manager Rev. 1 9/24/2009

# SAFETY PRECAUTIONS




Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the tool and hose.
These safety precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided in this manual.

The Hydraulic Breaker will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hoses before operation. Failure to do so could result in personal injury or equipment damage.

- Operator must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Establish a training program for all operators to ensure safe operation.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, gloves, ear, head, and breathing protection, and safety shoes at all times when operating the tool.
- Do not inspect, carry or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Supply hoses must have a minimum working pressure rating of 2500 psi/175 bar. Do not exceed rated working pressure of hydraulic hose used with this tool. Excess pressure may cause a leak or burst.
- Be sure all hose connections are tight.
- The hydraulic circuit control valve must be in the “OFF” position when coupling or uncoupling the tool. Wipe all couplers clean before connecting. Use only lint-free cloths. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Do not operate the tool at oil temperatures above 140°F/60°C. Operation at higher oil temperatures can cause operator discomfort and may damage the tool. Never come in contact with the tool bit, the bit can get hot.
- Do not operate a damaged, improperly adjusted, or incompletely assembled tool.
- Do not weld, cut with an acetylene torch, or hard-face the tool bit.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Do not exceed the rated limits of the tool or use the tool for applications beyond its design capacity.
- Always keep critical tool markings, such as labels and warning stickers legible.
- Always replace parts with replacement parts recommended by Stanley Hydraulic Tools.
- Check fastener tightness often and before each use daily.
- Never operate the tool if you cannot be sure that underground utilities are not present.
- Do not wear loose fitting clothing when operating the tool.

# SAFETY PRECAUTIONS

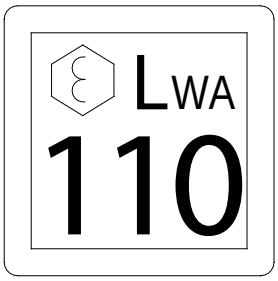
- Warning:  Hydraulic fluid under pressure could cause skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately.
- Keep all body parts away from the working tool.
- When handling material or the tool bit, wear your (PPE) Personal Protection Equipment.
- Be observant of the hydraulic hoses lying about the work area, they can be a tripping hazard.
- Always de-energize the hydraulic system when changing a tool bit.
- Take caution when changing a tool bit, tool bits can get very hot.
- Never use the tool in an explosive atmosphere, sparks from the breaking process could ignite explosive gas.
- Use proper lifting techniques when handling the tool, get help from a co-worker and do not over-reach.
- Use proper protection from falling or flying debris, keep bystanders at a safe distance.
- Do not exceed the rated flow and pressure. See Specifications in this manual for correct flow rate and pressure rating. Rapid failure of the internal seals may result.
- Failure to use hydraulic hose labeled and certified as non-conductive when using hydraulic tools on or near electric lines may result in death or serious injury.
- Handle and route hose carefully to avoid kinking, abrasions, cutting, or contact with high temperature surfaces. Do not use hose to pull or lift tools, power units, etc.
- Check entire hose for cuts, cracks, leaks, abrasions, bulges, or damage to couplings if any of these conditions exist, replace the hose immediately. Never use tape or any device to attempt to mend the hose.
- Do not use conductive hose on or near electric lines. This hose is not labeled or certified as non-conductive. Using this hose on or near electrical lines may result in death or serious injury.

**⚠ WARNING**

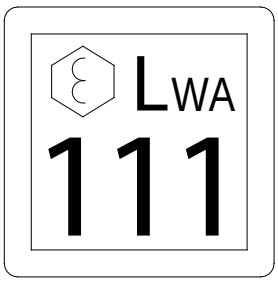
Exposure to crystalline Silica (sometimes called “silica dust”) as a result of breaking, drilling, or hammering of rock, concrete, asphalt or other materials may cause Silicosis (a serious lung disease), silicosis-related illnesses, cancer, or death.
Respiratory protection is highly recommended when working with materials containing Silica Dust.
Always wear a respirator approved for protection against crystalline silica.

# TOOL STICKERS & TAGS

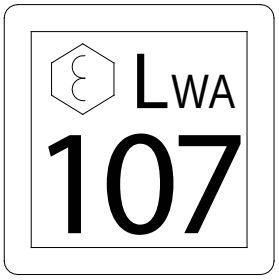
28409
Composite Decal
CE Tool Only



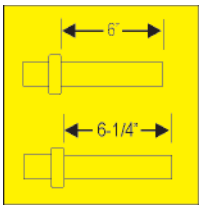

58604
Sound Level Decal
BR67




66656
Sound Level Decal
BR87




58601
Sound Level Decal
BR40, BR45, BR48




11208
Hex Shank Length Decal

11206
Circuit Type C Decal
CE Tool Only

11207
Circuit Type D Decal
CE Tool Only

71072
CE Tool Plate

# EQUIPMENT PROTECTION & CARE

- The hydraulic circuit control valve must be in the “OFF” position when coupling or uncoupling hydraulic tools. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Always store the tool in a clean dry space, safe from damage or pilferage.
- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the “IN” port. The circuit RETURN hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Keep tool bit sharp for maximum breaker performance. Make sure that tool bits are not chipped or rounded on the striking end.
- Never operate a breaker without a tool bit or without holding it against the work surface. This puts excessive strain on the breaker foot.
- Make certain that the recommended relief valves are installed in the pressure side of the system.

# OPERATION

The recommended hose size is .500 inch/12 mm I.D. up to 50 ft/15 m long and .625 inch/16 mm I.D. minimum up to 100 ft/30 m.

## PRE-OPERATION PROCEDURES

### CHECK POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 7-9 gpm/26-34 lpm at 1500-2000 psi/105-140 bar or 4-6 gpm/15-23 lpm at 1300 psi/90 bar depending on your model

2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2100-2250 psi/144-155 bar maximum.

### INSTALL TOOL BIT

1. Rotate the latch on the breaker foot downward (pointing away from the tool).

2. Insert the tool bit into the foot and pull the latch up to lock the tool bit in place.

### CONNECT HOSES

1. Wipe all hose couplers with a clean, lint-free cloth before making connections.

2. Connect the hoses from the hydraulic power source to the tool fittings or quick disconnects. It is a good practice to connect return hoses first and disconnect them last to minimize or avoid trapped pressure within the tool.

3. Observe flow indicators stamped on hose couplers to ensure that fluid flow is in the proper direction. The female coupler on the tool hose is the inlet coupler.

4. Move the hydraulic circuit control valve to the ON position to operate the tool.

**NOTE:**
**If uncoupled hoses are left in the sun, pressure increase within the hoses may make them difficult to connect. When possible, connect the free ends of the hoses together.**

## OPERATION PROCEDURES

1. Observe all safety precautions.

2. Install the appropriate tool bit for the job.

3. Place the bit firmly on the surface to be broken.

4. Squeeze the trigger to start the breaker. Adequate down pressure is very important. When the tool bit breaks through the obstruction or becomes bound, release the trigger and reposition the tool bit.

**NOTE:**
**Partially depressing the trigger allows the tool to run at slow speed. Slow-speed operation permits easier starting of the tool bit into the work surface.**

5. To start, break an opening (hole) in the center of the surface. After making a hole, break portions of the material into the original opening. For best productivity, the breaking should be done around the original hole.

The size of the broken material will vary with the strength and thickness of the base material and the amount of any reinforcement wire or rebar.

Harder material or more reinforcing wire or rebar will require taking smaller bites. To determine the most effective bite, start with 2 in. / 50 mm or smaller bites.

Bites can then be gradually increased until the broken piece becomes too large, requiring increased time to break off the piece.

Sticking of the tool bit occurs when too large a bite is being taken and the tool bit hammers into the material without the material fracturing. This causes the tool bit to become trapped in the surrounding material.

## COLD WEATHER OPERATION

If the breaker is to be used during cold weather, preheat the hydraulic fluid at low engine speed. When using the normally recommended fluid, fluid temperature should be at or above 50° F/10° C (400 ssu/82 centistokes) before use.

Damage to the hydraulic system or breaker can result from use with fluid that is too viscous or thick.

# SPECIFICATIONS

| | BR40 | BR45 | BR48 |
|---|---|---|---|
| Pressure Range | 1300-2000 psi /<br>90-140 bar | 1500-2000 psi /<br>105-140 bar | 1500-2000 psi /<br>105-140 bar |
| Flow Range | 4-6 gpm / 15-23 lpm | 7-9 gpm / 26-34 lpm | 7-9 gpm / 26-34 lpm<br>4-6 gpm / 15-23 lpm |
| Optimum Flow | 5-gpm / 20 lpm | 8-gpm / 30 lpm | 8-gpm / 30 lpm<br>5-gpm / 20 lpm |
| Maximum Back Pressure | 250 psi / 17 bar | 250 psi / 17 bar | 250 psi / 17 bar |
| Couplers | HTMA Flush Face | HTMA Flush Face | HTMA Flush Face |
| Connect Size | 3/8 Male Pipe Hose End | 3/8 Male Pipe Hose End | 3/8 Male Pipe Hose End |
| Weight (T Handle)<br>(Anti-Vibration Handle) | 41 lbs / 18 kg<br>44 lbs / 20 kg | 45/48 lbs / 20/21 kg<br>48/51 lbs / 22/23 kg | 55 lbs / 25 kg |
| Overall Length (T-Handle)<br>(Anti-Vibration Handle) | 23.5 in / 60 cm<br>25.2 in / 65 cm | 23.5/25.5 in / 60/65 cm<br>25.2/28.25 in / 65/72 cm | 28.5 in / 72.4 cm |
| Overall Width (T-Handles)<br>(Anti-Vibration Handle) | 14 in / 35 cm<br>17.5 in / 44.5 cm | 14 in / 35 cm<br>17.5 in / 44.5 cm | 17.25 in / 44 cm |
| Max. Fluid Temperature | 140°F / 60° C | 140°F / 60° C | 140°F / 60° C |
| System Type | Open Center | Open Center | Open Center |
| Port Size | SAE -8 O'ring | SAE -8 O'ring | SAE -8 O'ring |
| EHTMA Category<br>Type C, Type D | Type C | Type D | Type C<br>Type D |
| Filtering (Hydraulic Oil) | 25 Microns | 25 Microns | 25 Microns |
| System Relief Valve Setting | 2100-2250 psi | 2100-2250 psi | 2100-2250 psi |
| Guaranteed Sound Power<br>Level (2000/14/EC) | 107 dBA | 107 dBA | 107 dBA |
| Sound Pressure Level<br>1 Meter (ISO 11203) | 98 dBA | 98 dBA | 98 dBA |
| Vibration Level (ISO 8662-5)<br>Tee Handle | 10.0 m/sec² | 13.5 m/sec² | 9.9 m/sec² |
| Anti-Vibration Handle | 9.2 m/sec² | 10.1 m/sec² | |

| | BR67 | BR87 |
|---|---|---|
| Pressure Range | 1500-2000 psi /<br>105-140 bar | 1500-2000 psi /<br>105-140 bar |
| Flow Range | 7-9 gpm / 26-34 lpm | 7-9 gpm / 26-34 lpm |
| Optimum Flow | 8-gpm / 30 lpm | 8-gpm / 30 lpm |
| Maximum Back Pressure | 250 psi / 17 bar | 250 psi / 17 bar |
| Couplers | HTMA Flush Face | HTMA Flush Face |
| Connect Size | 3/8 Male Pipe Hose End | 3/8 Male Pipe Hose End |
| Weight (T Handle)<br>(Anti-Vibration Handle) | 67 lbs / 30 kg<br>75 lbs / 34 kg | 80 lbs / 36 kg<br>N/A |
| Overall Length (T-Handle)<br>(Anti-Vibration Handle) | 27 in / 69 cm<br>29 in / 74 cm | 27 in / 68 cm<br>N/A |
| Overall Width (T-Handles)<br>(Anti-Vibration Handle) | 16 in / 41 cm<br>18 in / 46 cm | 16 in / 40 cm<br>N/A |
| Max. Fluid Temperature | 140°F / 60° C | 140°F / 60° C |
| System Type | Open Center | Open Center |
| Port Size | SAE -8 O'ring | SAE -8 O'ring |
| EHTMA Category<br>Type C, Type D | Type D | Type D |
| Filtering (Hydraulic Oil) | 25 Microns | 25 Microns |
| System Relief Valve Setting | 2100-2250 psi | 2100-2250 psi |
| Guaranteed Sound Power<br>Level (2000/14/EC) | 110 dBA | 111 dBA |
| Sound Pressure Level<br>1 Meter (ISO 11203) | 99 dBA | 102 dBA |
| Vibration Level (ISO 8662-5)<br>Tee Handle | 20 m/sec² | 21.5 m/sec² |
| Anti-Vibration Handle | 10.2 m/sec² | N/A |

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